

ABSTRACT

The present invention relates to high-throughput systems and methods to prepare a large number of component combinations, at varying concentrations and identities, at the same time, and high-throughput methods to test tissue barrier transfer, such as transdermal transfer, of components in each combination. The methods of the present invention allow determination of the effects of inactive components, such as solvents, excipients, enhancers, adhesives and additives, on tissue barrier transfer of active components, such as pharmaceuticals. The invention thus encompasses the high-throughput testing of pharmaceutical compositions or formulations in order to determine the overall optimal composition or formulation for improved tissue transport, such as transdermal transport.